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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,340	05/24/2000	Hiroaki Takebe	826.1605/JDH	5834

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EXAMINER

LU, TOM Y

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/577,340		TAKEBE ET AL.	
	Examiner		Art Unit	
	Tom Y. Lu		2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14, 16, 17 and 19-24 is/are allowed.
- 6) ☒ Claim(s) 15, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment and written response filed on 10/21/2005 has been entered and considered.
2. Claims 1, 3, 11, 17, 19, 20 and 24 have been amended.
3. Claim 18 has been withdrawn from consideration.
4. Claims 1-26 are pending.

Response to Arguments

5. Upon entry of the amendment, the rejection of claims 1-8, 11-14, 16-17, 19-21 and 24 have been withdrawn.

Applicant's arguments filed on 10/21/2005 with respect to claims 15, 25 and 26 have been fully considered but they are not persuasive.

The Nishijama reference:

Applicant argues the Nishijama reference does not teach the feature of "changing the first segmentation area when a second segmentation area cannot be segmented corresponding to a feature amount of a category from remaining areas of the image" as recited in Claim 15. Applicant also argues the Nishijama reference does not teach the feature of "segmenting the character string image based on the best matches" as recited in claims 25 and 26.

Upon further review of specification and in light of applicant's arguments, the examiner respectfully disagrees as follows. With regard to the limitation of "changing the first segmentation area when a second segmentation area cannot be segmented corresponding to feature amount of a category from remaining areas of the image", the examiner notes the

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Nishijama reference teaches such feature as shown in figure 2A and 2B with elaboration on column 3, lines 3-21, the Nishijama reference teaches according to the standard pattern B(n), for example, when segmenting the letter “y” as shown in figure 2A, the standard pattern is between i2 and i4, which is incorrect because the remaining area of i2 to i7 does not support the full extraction of letter “y”. Therefore, a normalization process is required to correct the distortion by changing the first segmentation area of “t”, which as evidenced the size of letter “y” now is between i1 and i3. With regard to the feature of “segmenting the character string image based on the best matches”, the examiner notes, the letters such “t”, “y” and etc are segmented based on the best matches between the normalized pattern and standard pattern from the dictionary. For example, one would not consider the standard pattern of “y” with normalized value of “t” as the best match for an obvious reason.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 15, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishijama et al (U.S. Patent No. 5,253,303).

- a. Referring to Claim 15, the examiner notes Nishijama does not teach segmenting a touching position between two letters based on a minimum point of a black pixel projection histogram. Nishijama teaches segmenting letters by normalizing the letter patterns; comparing the normalized patterns with standard patterns and

performing segmentation based on a minimum distance difference. With regard to feature of “changing the first segmentation area when a second segmentation area cannot be segmented corresponding to feature amount of a category from remaining areas of the image”, Nishijama teaches such feature as shown in figure 2A and 2B with elaboration on column 3, lines 3-21, the Nishijama reference teaches according to the standard pattern B(n), for example, when segmenting the letter “y” as shown in figure 2A, the standard pattern is between i2 and i4, which is incorrect because the remaining area of i2 to i7 does not support the full extraction of letter “y”. Therefore, a normalization process is required to correct the distortion by changing the first segmentation area of “t”, which as evidenced the size of letter “y” now is between i1 and i3.

- b. Referring to Claim 25, Nishijama discloses storing a number of pixels character feature size for features to be extracted from a character string image (standard patterns are stored as pixel patterns in a dictionary); scanning the character string image and extracting a number of pixels image feature sizes of features in the character string image (the image “type” is scanned and normalized in size); comparing the number of pixels character feature sizes to the image feature sizes and determining best matches between character features sizes and image feature sizes (collating the positional information of the normalized values and the standard patterns is the same as comparing in the sizes because the positional information reveals the sizes of the character); and segmenting the character string image based on the best matches (the examiner notes, the letters such “t”,

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“y” and etc are segmented based on the best matches between the normalized pattern and standard pattern from the dictionary).

- c. With regard to Claim 26, the examiner notes the physical size in Nashijama is the size of the pattern, and the rest of the limitations are addressed in Claim 25.

Allowable Subject Matter

7. Claims 1-14, 16-17 and 19-24 are allowed.

The reasons for allowance are given the previous office action dated 7/21/2005.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

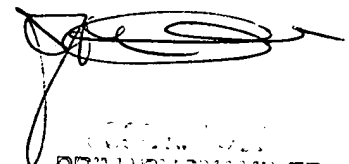
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y. Lu whose telephone number is (571) 272-7393. The examiner can normally be reached on 8:30AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Y. Lu



PRIMARY EXAMINER